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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/015,326	12/13/2001	Chongying Xu	ATMI - 515	2946
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25559 7590
ATMI, INC.
7 COMMERCE DRIVE
DANBURY, CT 06810



EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/015,326

Applicant(s)

XU ET AL.

Examiner

Virginia Manoharan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7 and 9-17 is/are rejected.
- 7) ☒ Claim(s) 18,19 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RD

DETAILED ACTION

Claims 10 & 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18 and 19 are rejected for the same reasons as set forth at section (a) page 2, of the previous Office Action. Since applicants did not address this rejection it is assumed they are acquiescing therein.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over McEntee (4,127,598) and Tsukuno et al (5,312, 947).

The above references are applied for the same combined reasons as set forth at page 3, first two paragraphs of the previous Office Action.

Claims 18-19 & 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed February 28, 2005 have been fully considered but they are not persuasive.

Applicant following argument such as:

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The McEntee reference "discloses removal of non-acidic and non-basic impurities, such as biphenyls, chlorinated biphenyls, vinyl chloride, carbon tetrachloride, and aromatic hydrocarbon impurities (see McEntee, column 4, lines 39-50), from impure silanes and siloxanes, which include cyclosiloxanes.." and "..The Tsukuno reference only suggest removal of ionic crystal, which are either organic or inorganic salts that are non-acidic and non-basic, and water, which is also non-acidic and non-basic, from a siloxanes crude product (see Tsukuno, column 2, lines 15-17 and 51-54),,,, ' ' are not persuasive of patentability because of the following reasons:

However, the process or method of McEntee and Tsukuno are not distinguished from the prior art based on the acidic and/or basic impurities. The impurities are directed to materials or fluid – in – process- which are not the basis for patentability of a process claim. Nonetheless, it is known to produce acidic by –products as impurities. Tsukuno at col. 2, lines 23-27 for e.g., suggests that "Where various organochlorosilanes alone or in ad-mixture of two or more are converted through hydrolysis into cyclic, linear or branched organopolysloxanes, the hydrolysis entails hydrochloric acid as a by-product."

Thus, McEntee impurities such as biphenyls, chlorinated biphenyls, vinyl chloride and etc., and Tsukuno ionic crystals impurities, like the claimed acidic and basic impurities, must obviously all be removed so as to ensure efficient siloxane purification. The instant method or process of removing the impurities such as, for example, by adsorption and distillation is the same process taught in the prior art. Applicants fail to delineate any process steps not shown nor render obvious by the prior art. Moreover,

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an artisan knows that the step of distillation would naturally or inherently removed any acidic or basic impurities, if present, since distillation is a physical unit of operation based on boiling point characteristic that does not involve any chemical reaction.

Furthermore, McEntee is not limited to the binaphyls and chlorinated biphenyls but suggests removing other impurities from the streams of silanes or siloxanes. See col. 4, lines 39-43. The ionic crystals of Tsunkuno appear to include basic materials. Note col. 3, lines 52-68. Tsunkuno also suggests removing water from the siloxanes. See e.g., col. 8, lines 25-33.

Thus, a prima facie case of obviousness is reasonably established by the prior art and has not been rebutted.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

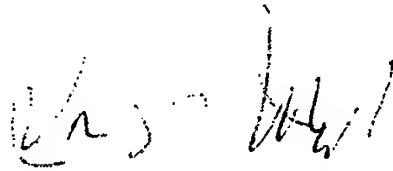
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-271-1450. The examiner can normally be reached on Tuesday-Friday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

V. Manoharan/af
May 23, 2005


VIRGINIA MANOHARAN
PRIMARY EXAMINER
ART UNIT 153/1764